Quiz 8

COMP9021 Principles of Programming

2016 session 1

Sample outputs

```
$ python3 quiz_8.py
Enter an integer: 0
Here is the grid that has been generated:
      NW  NW  NE  SW  NW  NW  SW
      NW  SW  SE  SE  SW  SE  NE
      SW  SE  SW  NE  NE  SW  NW
      NE  SW  NW  SW  SE  NW  NW
      SW  NE  NE  NE  NW  NE  NW
      SW  SE  SW  NE  SE  SE  SE
      SE  NW  NE  NE  SW  NW  NE

There is no path to (0, 0)
The preferred path to (6, 0) is:
   [(3, 3), (3, 4), (4, 3), (5, 4), (6, 3), (6, 2), (6, 1), (6, 0)]
There is no path to (6, 6)
The preferred path to (0, 6) is:
   [(3, 3), (2, 3), (1, 3), (0, 4), (0, 5), (0, 6)]
$ python3 quiz_8.py
Enter an integer: 1
Here is the grid that has been generated:
      SE  NE  SW  NE  NW  NW  NW
      NW  SE  NE  NW  NE  NW  NW
      NE  NW  SW  SE  NE  SW  NE
      NE  NE  NE  NW  SE  NW  NE
      SE  NW  NW  SE  SW  SE  SE
      NW  SW  NE  NW  NE  SE  SW
      NE  SW  NW  SE  SW  SW  NW

The preferred path to (0, 0) is:
   [(3, 3), (2, 2), (1, 2), (0, 1), (0, 0)]
There is no path to (6, 0)
The preferred path to (6, 6) is:
   [(3, 3), (3, 2), (4, 3), (5, 4), (6, 5), (6, 6)]
The preferred path to (0, 6) is:
   [(3, 3), (3, 2), (4, 3), (4, 4), (3, 5), (2, 4), (1, 4), (0, 4), (1, 5), (0, 6)]
```

```
$ python3 quiz_8.py
Enter an integer: 2
Here is the grid that has been generated:
     NE  NE  NE  SW  SE  SW  SW
     SE  NE  SE  NW  NW  SW  NW
     SW  NE  NE  SW  NW  SW  NW
     NW  SE  SE  SE  SE  NE  SE
     SW  SE  SE  SW  SE  NW  NW
     SW  SW  SW  NW  SE  NW  NW
     SE  NW  SW  NW  SW  NW  NW

There is no path to (0, 0)
The preferred path to (6, 0) is:
   [(3, 3), (4, 3), (5, 3), (6, 2), (6, 1), (6, 0)]
There is no path to (6, 6)
The preferred path to (0, 6) is:
   [(3, 3), (3, 4), (2, 5), (1, 6), (0, 6)]
$ python3 quiz_8.py
Enter an integer: 3
Here is the grid that has been generated:
     SE  SE  SW  NW  NE  NE  NW
     SW  SE  SE  NW  NW  NW  SE
     SE  SE  NW  NE  NE  SE  NE
     SW  NE  SW  NW  NW  NW  NW
     NW  SE  SW  NE  NE  SE  NW
     SE  SW  NW  SW  NW  NW  SW
     NW  SE  SW  NE  SW  SE  SW

There is no path to (0, 0)
The preferred path to (6, 0) is:
   [(3, 3), (3, 2), (4, 1), (4, 0), (5, 0), (6, 0)]
There is no path to (6, 6)
The preferred path to (0, 6) is:
   [(3, 3), (2, 3), (1, 4), (1, 5), (0, 6)]
```

```
$ python3 quiz_8.py
Enter an integer: 4
Here is the grid that has been generated:
      SE  SW  NE  NW  NW  SE  NE
      NE  NE  NW  SW  NE  SE  SW
      SW  SE  NE  SW  SE  NE  SW
      SW  SE  SE  SW  SW  SW  NE
      SW  NW  SE  SE  SE  NW  SW
      NE  SW  NE  SW  SW  SE  NW
      NW  SW  NW  NW  SE  SE  SW

There is no path to (0, 0)
There is no path to (6, 0)
The preferred path to (6, 6) is:
   [(3, 3), (3, 4), (4, 4), (5, 5), (6, 6)]
The preferred path to (0, 6) is:
   [(3, 3), (2, 4), (3, 5), (2, 6), (1, 5), (0, 6)]
$ python3 quiz_8.py
Enter an integer: 5
Here is the grid that has been generated:
      SW  SW  NE  NW  SE  NE  SE
      NE  SW  NW  SE  NW  NE  SE
      NE  SE  NW  SW  SE  NW  SE
      NE  SE  NW  SE  SE  NE  NE
      SE  SE  SE  SE  SW  SW  SE
      SE  SE  SE  NW  SW  NE  SW
      NW  SE  SE  SW  NE  SW  SW

The preferred path to (0, 0) is:
   [(3, 3), (4, 3), (5, 3), (5, 2), (4, 1), (3, 1), (3, 2), (2, 2), (1, 1), (0, 1), (0, 0)]
The preferred path to (6, 0) is:
   [(3, 3), (4, 3), (5, 3), (5, 2), (5, 1), (6, 0)]
The preferred path to (6, 6) is:
   [(3, 3), (4, 3), (5, 4), (5, 5), (6, 5), (6, 6)]
There is no path to (0, 6)
```